REMARKS

Claims 14 and 24 are currently amended. Reconsideration is urged.

It is respectfully submitted that the present amendment presents no new issues or new matter and places this case in condition for allowance. Reconsideration of the application in view of the above amendments and the following remarks is requested.

I. U.S. Publication No. 2006/0127974A1

Applicants would like to thank Examiner Gough for the teleconference on June 1, 2007 with Applicants' attorney Michael Krenicky. Applicants' attorney explained to Examiner Gough that U.S. Publication No. 2006/0127974A1 appears to be inaccurate in that it contains portions of another application, *i.e.* U.S. Application No. 10/485,745. The Examiner and Applicants' attorney agreed that U.S. Publication No. 2006/0127974A1 is inaccurate.

Applicants submit herewith a copy of International Application No. PCT/DK2003/000455 (WO 2004/003187). This publication contains the correct specification of the instant application filed under 35 U.S.C. 371. Reconsideration of the Applicants' earlier response filed on October 27, 2006 in light of this specification is requested.

II. The Rejection of Claim 24 under 35 U.S.C. 112

Claim 24 was rejected for lack of antecedent basis. Claim 24 is amended herein and reconsideration is urged.

III. The Rejection of Claims 14-22 under 35 U.S.C. 102(e)

Claims 14-23, 25, 26, 29 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Kaasgaard et al., U.S. patent publication no. 2004/0175812 (hereinafter simply referred to as "Kaasgaard"). The Examiner states that Kaasgaard discloses a step of "adding one or more compounds in the amount of at least 0.1% . . . either before and/or during fermentation. Applicants respectfully traverse this rejection.

Kaasgaard does not anticipate the claimed invention. Claim 14 relates to a method for fermenting a bacterium, producing an enzyme of interest, in a culture medium of at least 50 liters. The method requires, among other things, adding one or

more listed compounds to the culture medium before and/or during fermentation. Conversely, Kaasgaard is directed towards a method for recovering a protein of interest from a culture solution by adding a polyol, and/or a carbohydrate, and/or a derivative thereof, to the culture solution during recovery processing. See, *e.g.*, paragraph 9 of Kassgard, which describes added certain compounds to the culture solution prior to, or immediately after, said recovery step. Further, paragraph 12 describes, *inter alia*, avoiding formation of protein crystals/precipitatates during recovery processing. Moreover, paragraphs 42-54 describe the recovery process. Nowhere does Kaasgaard describe adding one or more of the compounds to the culture medium before and/or during fermentation, as required by the instant claims. Accordingly, Kaasgaard does not anticipate the claimed invention reconsideration is urged.

Further, to anticipate, the identical subject matter must not only be previously known, but the knowledge must be sufficiently enabling to place the information in the possession of the public. As Kaasgard does not describe adding the compounds of claim 14 during fermentation, but rather just before and/or during recovery, the public was not in possession of the benefits of applying the compounds in a fermentation step. Accordingly, Kaasgard does not anticipate the claimed invention.

IV. The Rejection of Claims 14-22 under 35 U.S.C. 102(b)

Claims 14-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Brothers *et al*. The Examiner states that applicants specifically define before and after fermentation in the instant specification. Applicants respectfully submit that the Examiner was incorrectly looking at an inaccurate publication. Reconsideration is urged.

Brothers et al. does not anticipate the claimed invention. Brothers et al. is directed to a recovery process in which the polyols are added after fermentation. In particular, the polyol solvent is circulated through the cake after fermentation and concentration. See Brothers et al. at, e.g., Col. 2, lines 10-28 and Col. 5, lines 21-30. Thus, Brothers et al. does not anticipate the claimed invention as it does not teach the step of: adding one or more of the recited compounds to the culture medium before and/or during fermentation.

Further, Applicants specification does not define fermentation as described by the Examiner. Reconsideration in light of the understanding that the U.S. publication for the instant application is inaccurate is requested. Notwithstanding this traversal,

Applicants note that fermentation is described in the specification on Page 5, lines 25-33, and Page 6, lines 1-20. One of ordinary skill in the art of making enzymes would understand that fermentation occurs before recovery of enzyme.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 102(b). Applicants respectfully request reconsideration and withdrawal of the rejection.

V. The Rejection of Claims 14-22 under 35 U.S.C. 103

Claims 14-22 are rejected under 35 U.S.C. 103 as obvious over Kaasgaard. This rejection is respectfully traversed.

Kaasgaard does not teach or suggest, alone or in combination, adding 1,2-propandiol, 1,3-propandiol, ethylene glycol, trehalose, xylitol, arabitol, dulcitol, erythritol, sorbitol and a polyether having an average molecular weight less than 1000 to the culture medium before and/or during fermentation in a process of fermenting a bacterium for an enzyme of interest and the benefits of doing so would not be predictable in light of this reference. Reconsideration is urged.

Claims 14-22 are rejected under 35 U.S.C. 103 as obvious over Brothers *et al.* in view of Schreiber and GB 10001173 and Boyer et al. This rejection is respectfully traversed.

As previously discussed, Brothers et al. does not disclose the process of the present invention, as Brothers does not teach adding one or more of the recited compounds to the culture medium before and/or during fermentation.

Schreiber also discloses a process for recovery of proteins, and involving adding polyoxyethylene glycol after fermentation.

GB 1001173 is directed to a process of production of a galactose oxidase from a fungus (*Polyporus circinatus Fr.*).

Boyer et al. is directed to production of an alkaline *Bacillus* protease, in which suitable carbon sources are indicated as glucose, mannose, fructose, mannitol, maltose, cellobiose, sucrose, dextrin, starch, hydrolyzed starch, molasses, etc.

None of the cited reference teach or suggest, alone or in combination, adding 1,2-propandiol, 1,3-propandiol, ethylene glycol, trehalose, xylitol, arabitol, dulcitol, erythritol, sorbitol and a polyether having an average molecular weight less than 1000 to the culture medium before and/or during fermentation in a process of fermenting a

bacterium for an enzyme of interest and the benefits of doing so would not be predictable in light of the above references either alone or in combination.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 103. Applicants respectfully request reconsideration and withdrawal of the rejection.

VI. Conclusion

In view of the above, it is respectfully submitted that all claims are in condition for allowance. Early action to that end is respectfully requested. The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

Respectfully submitted,

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